



DEPARTMENT OF THE NAVY  
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From: Commanding Officer, Navy Environmental Health Center  
To: Commander, Atlantic Division, Naval Facilities Engineering  
Command, Attn: Richard Stryker, 1510 Gilbert Street,  
Norfolk, VA 23511-2699

Subj: MEDICAL REVIEW OF INSTALLATION RESTORATION PROGRAM  
DOCUMENTS FOR NAVAL WEAPONS STATION YORKTOWN, YORKTOWN,  
VIRGINIA

Ref: (a) Baker Environmental, Inc. transmittal ltr of 19 Jun 96

Encl: (1) Health and Safety Plan Review  
(2) Medical/Health Comments Survey

1. Per reference (a), we have completed a medical review of the "Health and Safety Plan Addendum, Remedial Investigation for Sites 4, 21, and 22, Naval Weapons Station Yorktown, Yorktown, Virginia." Our comments are provided in enclosure (1).

2. Please complete and return enclosure (2). Your comments are needed to continually improve our services to you.

3. We are available to discuss the enclosed information by telephone with you and, if necessary, with you and your contractor. If you require additional assistance, please call Mr. Donald Coons at (757) 363-5547 or Mr. David McConaughy at (757) 363-5557. The DSN prefix is 864.

*Y. P. Walker*  
Y. P. WALKER  
By direction

## HEALTH AND SAFETY PLAN REVIEW

Ref: (a) 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response)  
(b) Navy/Marine Corps Installation Restoration Manual (February 1992)

### General Comments:

1. The "Health and Safety Plan Addendum, Remedial Investigation for Sites 4, 21, and 22, Naval Weapons Station Yorktown, Yorktown, VA, Contract N62470-89-D-4814, Contract Task Order No. 0349," was prepared for LANTNAVFACENGCOM, by Baker Environmental, Inc., and forwarded to the Navy Environmental Health Center on 24 June 1996. The document is dated 19 June 1996.
2. The method for the review is to compare the health and safety plan (HASP) to federal requirements under OSHA regulations and to Department of the Navy requirements under the "Navy/Marine Corps Installation Restoration Manual" (see references (a) and (b) above). We noted deviations and/or differences in the plan from these two primary references. A list of acronyms used in our comments is included as Attachment (1).
3. The points of contact for review of the HASP are Mr. Donald J. Coons, Physical Science Technician, or Mr. David McConaughy, Industrial Hygienist, who may be contacted at (757) 363-5547 or 363-5557. The DSN prefix is 864.

### Administrative Comment:

1. This document is designed to be used in conjunction with the Master Site HASP for the Naval Weapons Station Yorktown. General information, required in each HASP, is presented in the Master HASP and identified as such in the Addendum's "Table of Contents" by italicized type. While this can be a useful method for multiple site projects, we noted several problems. Much site-specific information is not provided in this Addendum. For example, information pertaining to site-specific task hazard analyses, routine decontamination for personnel and/or equipment, site control methods, subcontractor requirements, and thermal stress is not included. Additionally, information stating where on-site, the Master Site HASP will be located is not provided. We recommend reviewing anticipated site operations and providing site-specific information in the final site-specific Addendum.

### Specific Comments:

#### 1. Page 3-3, Section 3.3.5, "Task-Specific Hazards":

##### Comments:

a. This section states, "Table 3-1, located in the "Tables" section at the end of this HASP Addendum, lists the field activities to be performed at each area under investigation. Section 3.3.5 in the Master Site HASP describes the hazards that coincide with each field operation." Information in the Master document and the Addendum is general in nature and not site-specific. Information, such as "equipment to be used," and "principal steps to be taken" during each task is not provided. For its clarity and ease of use, a suggested format for a task-hazard analysis can be found in the U. S. Army Corps of Engineers Health and Safety Manual, EM 385-1.1, 1 October 1992, on page 5, Figure 1-1. The benefit to this format is that all of the information required in a task hazard analysis is located on a single page.

b. The last sentence in this section states, "Specific potential hazards at each site are included in the following subsections." Information provided in the referenced "following sections" does not clearly identify the specific potential hazards for the sites.

##### Recommendations:

a. For its clarity and ease of use we recommend using the report format for task hazard analysis found on page 5, Figure 1-1, in the U.S. Army Corps of Engineers Health and Safety Manual, EM 385-1.1, dated October 1, 1992.

b. Include information regarding COCs anticipated, and a specific task hazard analysis for each site, in the final Addendum.

#### 2. Page 5-1, Section 5.0, "Environmental Monitoring":

##### Comments:

a. The first sentence in Section 5.1, "Personal Monitoring," states that "Personal monitoring, at a minimum, will include use of a PID . . ." Personal monitoring is done to determine compliance with OSHA standards and is conducted within the employee's breathing zone. These types of samples are usually collected with a small sampling pump and collection device. Direct reading instruments, such as a PID, are generally not appropriate for personal monitoring.

b. Chemicals, other than those measurable by a PID, are listed in Table 3-2, "Chemical/Physical Properties for Previously Detected Organic Constituents Sites 4 and 21, Naval Weapons Station Yorktown, Yorktown, Virginia."

c. Information pertaining to the calibration and maintenance of air-monitoring equipment is not included in this document.

Recommendations:

- a. Revise this section to correctly differentiate between “personal” and “area monitoring.”
- b. Additional sampling methods, such as using a direct reading dust monitor, need to be included. For example, Dieldrin and HMX cannot be detected by the PID and are listed in Table 3-2.
- c. We recommend that all air-monitoring equipment be calibrated before and after each period of use in accordance with standard industrial hygiene practice and manufacturer’s recommendations.

3. Page 8-1, Section 8.0, “Emergency Procedures”:

Comment: Guidance found in the note at the bottom of the page states, “In emergencies, personnel may be transported to Building 1806, which is the WPNSTA Yorktown Branch Medical Clinic, for initial treatment.” A map and written directions to the medical clinic are not provided.

Recommendation: Include map and written directions to the WPNSTA Medical Clinic in the final Addendum.

4. Page 8-3, Section 8.7.2, “Chemical Injury”:

Comment: The first bullet of the first paragraph states, “Eye Exposure - If contaminated solid or liquid gets into the eyes, wash the eyes immediately at the 15-minute emergency eyewash station or with the emergency eyewash bottle when an eye wash station is not available.” The American National Standards Institute (ANSI) Standard Z358.1-1990 states, personal eyewash bottles may support plumbed and self-contained units but shall not replace them. It is unclear if appropriate emergency eyewash equipment will be available at these sites.

Recommendation: Include information stating that appropriate emergency eyewash equipment will be available during hours of work at these sites.

5. Table 8-1, “Emergency Telephone Numbers, Sites 2, 8, 18, and SSA 14”:

Comment: The telephone number provided for a “Central Virginia Poison Information Services” is incorrect. The correct telephone number is (804) 828-9123 or 1-800-552-6337.

Recommendation: We recommend that all emergency telephone numbers be verified prior to start of site operations.

6. Figures 8-1, "Emergency Hospital Route Non-Chemical Exposure Incidents, Mary Immaculate Hospital," 8-2, "Emergency Hospital Route Chemical Exposure Incidents Riverside Medical Center," and Figure 8-3, "Written Directions to Public Hospitals, Naval Weapons Station Yorktown":

Comment: Emergency telephone numbers were not provided with the maps or with the written directions.

Recommendation: To facilitate locating emergency telephone number(s), we recommend that these numbers be included along with the map(s) and /or with the written directions.

7. Tables Section, Table 3-2, "Chemical/Physical Properties for Previously Detected Organic Constituents Sites 4 and 21":

Comment: This Addendum was prepared for work to be performed at Sites 4, 21, and 22. Information describing potential COCs at Site 22 is not provided.

Recommendation: Include information pertaining to all potential COCs for Site 22 in the final HASP.

## ACRONYMS

ACGIH:	American Conference of Governmental Industrial Hygienists
ANSI:	American National Standards Institute
ATSDR:	Agency for Toxic Substances and Disease Registry
BBP:	Bloodborne Pathogen Program
CPR:	Cardiopulmonary Resuscitation
CRZ:	Contamination Reduction Zone
EIC:	Engineer-in-Charge
EMS:	Emergency Medical Service
EPA:	Environmental Protection Agency
EZ:	Exclusion Zone
HASP:	Health and Safety Plan
HBV:	Hepatitis B Virus
HIV:	Human Immunodeficiency Virus
IDLH:	Immediately Dangerous to Life and Health
LEL	Lower Explosive Limit
LEPC:	Local Emergency Planning Committee
MSDS:	Material Safety Data Sheet
NIOSH:	National Institute for Occupational Safety and Health
NOSC:	Navy On-Scene Coordinator
NOSCDR:	Navy On-Scene Commander
OSHA:	Occupational Safety and Health Administration
OV:	Organic Vapor
PCB:	Polychlorinated Biphenyl
PEL:	Permissible Exposure Limit
PID:	Photoionization Device
PPE:	Personal Protective Equipment
PPM:	Parts Per Million
SCBA:	Self Contained Breathing Apparatus
SOP:	Standard Operating Procedure
STEL:	Short Term Exposure Limit
TLV:	Threshold Limit Value

FROM: \_\_\_\_\_  
 (YOUR NAME/COMMAND)  
 TO: NAVENVIRHLTHCEN, ENVIRONMENTAL PROGRAMS  
 FAX: COM: (757) 444-7261/DSN: 564-7261

## MEDICAL/HEALTH COMMENTS - YOUR VIEW

Please help us improve our review process by indicating the extent to which you agree or disagree with the comments we provided your activity.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. "Value added" to IR/BRAC process?	1	2	3	4	5
2. Received in a timely manner?	1	2	3	4	5
3. High level of technical expertise?	1	2	3	4	5
4. Very useful to the RPM?	1	2	3	4	5
5. Contractor incorporated comments?	1	2	3	4	5
6. Easily readable/useful format?	1	2	3	4	5
7. Overall review was of high quality?	1	2	3	4	5
8. NAVENVIRHLTHCEN was easily accessible?	1	2	3	4	5
9. NAVENVIRHLTHCEN input during scoping or workplan development would be "value added"?	1	2	3	4	5
10. Added involvement in IR/BRAC document needed?	1	2	3	4	5

Please return by fax using the box provided at the top of this page. If you have any other comments, please list them below or telephone Ms. Mary Ann Simmons, Industrial Hygienist at (757) 363-5556, DSN 864, at any time to discuss your viewpoint. As our customer, your comments and suggestions of how we can improve our services to you are important!